

Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone (304) 926-0475
Fax (304) 926-0479



Jim Justice, Governor
Austin Caperton, Cabinet Secretary
www.dep.wv.gov

west virginia department of environmental protection

G65-C GENERAL PERMIT ENGINEERING EVALUATION

PREVENTION AND CONTROL OF AIR POLLUTION IN REGARD TO THE CONSTRUCTION, MODIFICATION,
RELOCATION, ADMINISTRATIVE UPDATE AND OPERATION OF
EMERGENCY GENERATORS

APPLICATION NO.: G65-C565

FACILITY ID: **075-00037**

☒ CONSTRUCTION
☐ MODIFICATION
☐ RELOCATION

☐ CLASS I ADMINISTRATIVE UPDATE
☐ CLASS II ADMINISTRATIVE UPDATE

BACKGROUND INFORMATION

Name of Applicant (as registered with the WV Secretary of State's Office): Pocahontas County
Public Service District

Federal Employer ID No. (FEIN): 55-0604862

Applicant's Mailing Address: HC 63 Box 122

City: Frank

State: West Virginia

ZIP Code: 24920

Facility Name: Snowshoe Village Pump Station

Operating Site Physical Address: New sewage pump station to be located at site of former
wastewater treatment plant at the end of Lagoon Drive, which intersects West Virginia Route 9/3
(aka Snowshoe Drive) approximately 3.7 miles north of its intersection with West Virginia Route 66.
If none available, list road, city or town and zip of facility.

City: Slatyfork, West Virginia

Zip Code: 24920

County: Pocahontas

Latitude & Longitude Coordinates (NAD83, Decimal Degrees to 5 digits):

Latitude: 38.42776

Longitude: -80.00309

SIC Code: 4952

NAICS Code: 221320

Date Application Received:

March 6, 2017

Fee Amount: \$250.00

Date Fee Received: March 6, 2017

Applicant Ad Date: Not Applicable.

Newspaper: Not Applicable.

Date Application Complete: May 10, 2017

Due Date of Final Action: June 24, 2017

Engineer Assigned: Renu M. Chakrabarty

Description of Permitting Action: This is a new sewage pumping station to convey sewage from the
existing collection system to a new wastewater treatment plant.

ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

The following table indicates which methodology was used in the emissions determination:

| Emission Unit ID# | Process Equipment | Calculation Methodology (e.g. ProMax, GlyCalc, mfg. data, AP-42, etc.) |
|-------------------|--|--|
| EG-10 | 4SLB RICE, 69 HP, 3.3 liter displacement | Manufacturer Data |

The total facility PTE for the emergency generator is shown in the following table:

| Pollutant | EG PTE (tons/year) |
|----------------------------|--------------------|
| Nitrogen Oxides | 0.1 |
| Carbon Monoxide | 0.18 |
| Volatile Organic Compounds | 0.004 |
| Particulate Matter | 0.0001 |
| Particulate Matter-10/2.5 | 0.0001 |
| Sulfur Dioxide | 0.0003 |

Calculations are based on exhaust emission data from the Cummins Exhaust Emission Data Sheet and 500 hour per year operation. Please note that if the unit actually operated 500 hours per year in non-emergency service, it would no longer qualify as an emergency generator for purposes of 40CFR60, Subpart IIII and 40CFR63, Subpart ZZZZ.

REGULATORY APPLICABILITY

45CSR13 (Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation)

45CSR13 applies to this source due to the fact that the applicant is defined as a “stationary source” under 45CSR13 Section 2.24.b. *Stationary source* means, for the purpose of this rule, any building, structure, facility, installation, or emission unit or combination thereof, excluding any emission unit which meets or falls below the criteria delineated in Table 45-13B which: (a) is subject to any substantive requirement of an emission control rule promulgated by the Secretary; (b) discharges or has the potential to discharge more than six (6) pounds per hour and ten (10) tons per year, or has the potential to discharge more than 144 pounds per calendar day, of any regulated air pollutant; (c) discharges or has the potential to discharge more than two (2) pounds per hour or five (5) tons per year of hazardous air pollutants considered on an aggregated basis; (d) discharges or has the potential to discharge any air pollutant(s) listed in Table 45-13A in the amounts shown in Table 45-13A or greater; or, (e) an owner or operator voluntarily chooses to be subject to a construction or modification permit pursuant to this rule, even though not otherwise required to do so. 45CSR13 has an original effective date of June 1, 1974.

The applicant meets the definition of a stationary source because (check all that apply):

- ☒ Subject to a substantive requirement of an emission control rule promulgated by the Secretary.
- ☐ Discharges or has the potential to discharge more than six (6) pounds per hour and ten (10) tons per year, or has the potential to discharge more than 144 pounds per calendar day, of any regulated air pollutant.
- ☐ Discharges or has the potential to discharge more than two (2) pounds per hour or five (5) tons per year of hazardous air pollutants considered on an aggregated basis.
- ☐ Discharges or has the potential to discharge any air pollutant(s) listed in Table 45-13A in the amounts shown in Table 45-13A or greater.
- ☐ Voluntarily chooses to be subject to a construction or modification permit pursuant to this rule, even though not otherwise required to do so.

General Permit G65-C Registration satisfies the construction, modification, relocation and operating permit requirements of 45CSR13. General Permit G65-C sets forth reasonable conditions that enable eligible registrants to establish enforceable permit limits.

Section 5 of 45CSR13 provides the permit application and reporting requirements for construction of and modifications to stationary sources. No person shall cause, suffer, allow or permit the construction, modification, relocation and operation of any stationary source to be commenced without notifying the Secretary of such intent and obtaining a permit to construct, modify, relocate and operate the stationary source as required in the rule or any other applicable rule promulgated by the Secretary.

45CSR16 (Standards of Performance for New Stationary Sources Pursuant to 40 CFR Part 60)

45CSR16 applies to all registrants that are subject to any of the NSPS requirements described in more detail in the Federal Regulations section. Applicable requirements of NSPS, Subparts IIII and JJJJ are included in General Permit G65-C.

The applicant is subject to:

- ☒ 40CFR60 Subpart IIII
- ☐ 40CFR60 Subpart JJJJ

45CSR22 (Air Quality Management Fee Program)

45CSR22 is the program to collect fees for certificates to operate and for permits to construct or modify sources of air pollution. 45CSR22 applies to all registrants. The general permit fee of \$500 is defined in 45CSR13. In addition to the application fee, all applicants subject to NSPS requirements or NESHAP requirements shall pay additional fees of \$1,000 and \$2,500, respectively.

Registrants are also required to obtain and have in effect a valid certificate to operate in accordance with 45CSR22 §4.1. The fee group for General Permit G65-C is 9M (all other sources) with an annual operating fee of \$200.

40CFR60 Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines)

Subpart IIII sets forth non-methane hydrocarbon (NMHC), hydrocarbon (HC), nitrogen oxides (NO_x), carbon monoxide (CO), and particulate matter (PM) emission limits, fuel requirements, installation requirements, and monitoring requirements based on the year of installation of the subject internal combustion engine. The provisions for stationary compression ignition (CI) internal combustion engines for owners or operators of this Subpart have been included in General Permit G65-C, Section 7. The following CI engines are subject to this section:

| Emission Unit ID# | Engine Description (Make, Model) | Engine Size (HP) | Date of Manufacture | Provide Justification how 40CFR60 Subpart IIII is met. |
|--------------------------|---|-------------------------|----------------------------|--|
| EG-10 | Cummins 4BT3.3-G5 NR3 | 69 | November 25, 2015 | <input type="checkbox"/> Met Emission Standard <input checked="" type="checkbox"/> Certified Engine |

40CFR63 Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines)

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This Subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

Since this is a new affected source, 40 CFR 63, Subpart ZZZZ, directs the source to meet the requirements of 40 CDR 60, Subpart IIII.

RECOMMENDATION TO DIRECTOR

The information provided in the permit application, including all supplemental information received, indicates the applicant meets all the requirements of applicable regulations and the applicant has shown they meet the eligibility requirements of General Permit G65-C. Therefore, impact on the surrounding area should be minimized and it is recommended that the facility should be granted registration under General Permit G65-C.

Permit Engineer Signature: _____

Name and Title: Renu M. Chakrabarty, PE

Date: May 12, 2017

Pocahontas County Public Service District

Slayfork, WV

| BHP | Emergency Generator | Location | NO _x | | | CO | | | THC (VOC surrogate) | | | PM | | | SO ₂ | | |
|-----|----------------------------|---|-----------------|-------|-----------|-----------|-------|-----------|---------------------|-------|-----------|-----------|-------|-----------|-----------------|-------|-----------|
| | | | gm/bhp-hr | lb/hr | ton/year* | gm/bhp-hr | lb/hr | ton/year* | gm/bhp-hr | lb/hr | ton/year* | gm/bhp-hr | lb/hr | ton/year* | gm/bhp-hr | lb/hr | ton/year* |
| 69 | Cummins 4BT3.3-G5 NR3 4SLB | Snowshoe Village Pump Station G65-565 075-00037 | 2.7 | 0.411 | 0.10 | 2.81 | 0.700 | 0.18 | 0.1 | 0.015 | 0.0038 | 0.09 | 0.001 | 0.00013 | 0.17 | 0.001 | 0.0003 |

500 hr/yr for emergency generators per EPA policy

Factors from Cummins Exhaust Emission Data Sheet